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TOWN OF ACTON

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Engineering Department

INTERDEPARTMENTAL COMMUNICATION

To: John Murray, Temporary Town Manager Date: July 9, 2007

From: Engineering Department

Subject: Keyspan Energy, Cathodic Protection Work Request

We have reviewed the work requests from Keyspan Energy Delivery to install 4 cathodic protection facilities at the following locations:

- 1. Kingman Road @ Willow Street
- 2. School Street by Piper Road
- 3. Country Club Road by house #5 & #9
- 4. Wood Lane by house #41 & #49

I spoke with Keyspan & their subcontractor (Russ Berry) in regards to the proposed work. According to our discussions, this work is being proposed in order to provide corrosion protection for the existing gas mains. There are two components of the cathodic protection facility. The first part of the corrosion protection will be a 6" x 6" pressure-treated post that will be set approximately 5-6 feet from the existing utility poles. This post will be about 6-feet in height above the ground surface and will be used to attach the proposed electric meter and the mechanical devices used for the corrosion protection. We were told by Keyspan that the electric wiring to the existing utility pole will be installed underground for all these units. We were also told by Keyspan that they were unable to obtain permission to install these units onto the existing utility poles. As a result, they have to install these posts so that they can attach the required devices necessary for the corrosion protection. Below are photos of an existing rectifier pole located on Parker Street at the intersection of River Street:



Figure 1- Existing Rectifier Pole on Parker St opposite River Street





Figure 2 - Typical set-up of an existing Keyspan cathodic protection rectifier pole

The second part of the cathodic protection is a series of metal rods (anodes) that will be drilled into the ground for a depth of about 35-feet. I was told by Keyspan that these metal rods and the associated wiring will be entirely underground.

We recommend that the Board of Selectmen also consider the following conditions:

- 1. This approval is conditional and Keyspan is required to relocate the facilities, at no additional cost to the Town, to accommodate future considerations by the Town such as sidewalks, etc...
- 2. The approval of these facilities is limited to the exact dimensions (height, width, etc) as set forth in this submittal. Keyspan cannot increase the size of these facilities or add additional units without first obtaining approval from the Board of Selectmen.
- 3. No other facilities from other utility companies can be added onto this unit without first obtaining approval from the Board of Selectmen.
- 4. Keyspan will install screening around these facilities, as appropriate, to obstruct the view of these units to maintain the character of the Town.
- 5. Keyspan shall pay a fee to the Town to allow these facilities to be installed on Town property. We recommend that the Town charge a \$40 fee per location. This is the

same fee that is charged for petitions for new utility poles.

- 6. Keyspan will be responsible to ensure that the work does not encroach onto private property. If the work is located on private property, Keyspan will need to seek permission from the private landowners before they can enter upon the premises. The Town does not have the authority to grant permission to work on private property.
- 7. Any locations where Keyspan needs to cut the road pavement to access the existing gas main should have the final pavement patch done by the "grind and inlay method" as previously used by Keyspan in other locations in Town. Keyspan will need to obtain Permits to Construct within a Public Way from this department prior to starting work.
- 8. Keyspan needs to incorporate any existing cathodic protection facilities in Town into this submittal so that these conditions apply to all locations in Acton.

We visited the 4 locations and have the following comments regarding the proposed work:





Figure 3 - UP #269-1 on Kingman Rd at Willow St

There are existing stone bounds that mark the sideline of Kingman Road & Willow
Street in close proximity to the proposed work. We have enclosed a photocopy of the
as-built plan for Kingman Road showing the locations of these survey markers. If these
bounds are disturbed during the construction, Keyspan should be required to hire a
registered land surveyor to reset and certify the new bound location.

School Street - by Piper Road

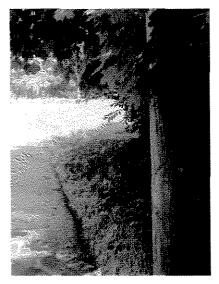




Figure 4 - UP #49-23 on School St at Piper Rd

- The proposed post and the utility boxes need to be installed as close to the wall as
 possible to prevent the proposed unit from overhanging the existing sidewalk. We want
 to prevent any injuries to pedestrians and bicyclists as well as potential damage caused
 by the sidewalk plows during the winter months.
- There is an existing stone bound that mark the sideline of School Street by Piper Road that is located close to the proposed work. We have enclosed a photocopy of the sidewalk plan for School Street from 1995 that shows this survey marker by Piper Road. If this bound is disturbed during the construction, Keyspan should be required to hire a registered land surveyor to reset and certify the new bound location.

Country Club Road - by house #5 & #9





Figure 5 - UP #137-4 - Country Club Rd - between house #5 & #9

 There is an existing concrete bound that marks the sideline of Country Club Road adjacent to the driveway for house #9. We have enclosed a photocopy of the recorded plan of land for #5 & #9 Country Club Road (Registry Plan #461 of 1990). If this bound is disturbed during the construction, Keyspan should be required to hire a registered land surveyor to reset and certify the new bound location.

Wood Lane - by house #41 & #49





Figure 6 - UP #6 - Wood Lane - between house #41 & #49

The proposed work appears to be located across the frontage of a 40' wide strip of town
 —owned conservation land attached to the Arboretum.

Keyspan had also mentioned that they wanted to install a rectifier pole & ground bed along Mass Ave by Prospect Street and they need to repair/replace an existing unit on Brook Street opposite Donelans



Figure 7 - Mass Ave by Prospect St

Mass Ave (Route 111) is a state-highway and this work will require a permit from MassHighway. We have enclosed a copy of the proposed site plan for Davis Place at this location to show the limit of the state layout in relation to the existing sidewalk



Figure 8 - Existing Rectifier Pole on Brook St

Keyspan said that they need to make some modifications to their proposals for Mass Ave & Brook Street and that is why they did not include these 2 locations in the submittal to the Board of Selectmen at this time.

We do not foresee any problems with granting this petition. If you have any questions, or need additional information, please let us know.